Spring 1996

Bulletin - Spring, 1996

Civil Aviation Medical Association

BULLETIN

of the CIVIL AVIATION MEDICAL ASSOCIATION

SPRING 1996

LONG-AWAITED MEDICAL CHANGES PUBLISHED

Wednesday, March 13, 1996 was a historical day for U.S. civil aviation medicine. That's the day the long-awaited changes to FAR Part 61 and 67 finally came out. Indeed, long is hardly the word for it since some of the general aviation organizations had been petitioning for some of the changes since 1979. Other organizations, including the American Medical Association, had proposed modifications in 1985, and virtually all the "alphabet" aviation groups were actively lobbying for changes by the late 80's.

On balance, the new regulations are positive. Some are long overdue, and others will be welcomed by various aviation groups. Most of the proposals described as "draconian" by some, did not find their way into the final rules. Several of the changes are a bit unclear however. The implementing instructions to practicing AMEs may help to straighten out some of the confusion. Each AME will be sent copies of these new instructions prior to the date the new rules take effect–six months from the above publication day.

One of the more eagerly awaited changes extends the validity period for a Class III medical certificate for younger pilots. Previously, certificates were good for 24 months but under the new rules, they'll be good for 36 months for pilots under age 40. Those age 40 and over will still be required to have a medical examination every two years as has been the case in the past.

Another welcome change involves vision. The FAA is no longer much concerned about uncorrected vision. If a pilot can meet a 20/20 standard for distant vision, he's qualified for a Class I or II medical certificate no matter whether he needs glasses or contact lenses to do so. The same thing applies to Class III holders except that the level is set at 20/40. This eliminates the need for a Statement of Demonstrated Ability (SODA) for those with relatively poor uncorrected vision but who correct well with glasses or contacts. Under the old rules, it was necessary in some cases to have an eye consultation, submit reports, and generally work through a somewhat bureaucratic maze.

There will be a new standard for intermediate

✈ ✈ ✈ *(continued on page 5)*

AGE 60 RULE PUT TO BED — AGAIN

The FAA has once more determined that modification of the so-called "Age 60 Rule" is not wise. This rule, first developed in 1959, states that no pilot may serve in a scheduled airliner cockpit after he or she reaches their 60th birthday. Although challenged frequently since it was first put in place, it has been upheld each time.

In a related action, the FAA extended the rule to operations conducted under FAR Part 135 – the regulation which governs commuter flights among other things. Until now, pilots over 60 could continue to fly commuter airliners–mostly turboprops. However, the recent pressure to reduce the commuter aircraft accident rate resulted in a number of regulation changes. Specifically, many of the major airline rules now

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BULLETIN *of the Civil Aviation Medical Association (CAMA)*

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The BULLETIN of the Civil Aviation Medical Association (CAMA) is published quarterly for CAMA members and others interested in aviation medicine.

The CAMA motto is: "Pro Bono Publico," "For the good of the public."

CAMA's organizational purpose is: "To provide the civil aviation physicians with education, representation to government and a voice with industry and the public."

The BULLETIN editor welcomes submissions of articles photos for publication. Please mail text in typewritten form or in WordPerfect software on floppy computer disk to:

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EDITORIAL
AEROMEDICAL ANARCHY: CAN WE AFFORD IT?

The FAA is presently considering some of the most revolutionary medical regulation changes in the 70 years since the federal government began to regulate civilian aviation. These proposed changes will permit recreational pilots and those flying within recreational limits to fly without a medical certificate. Although the comment period has closed, it is not clear when–or if–the new rules will be published.

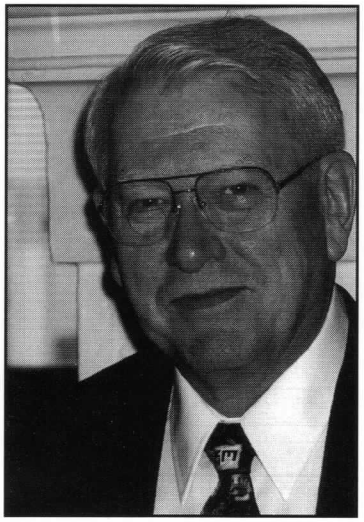
As expected, most general aviation public comments were overwhelmingly in favor of doing away with medical certificates. The aviation "alphabet" organizations did a good job of stirring up their members to write letters in support of the elimination. And few pilots would be expected to opt for medical examinations no matter how much they or the system might benefit from them. The result will be a sort of medical anarchy in which unqualified pilots will take advantage of this loophole to fly when they should not be doing so.

It certainly won't rain airplanes of course. But without question, there will be an increase in the number of medically-related accidents. Most won't draw an unusual amount of attention, but all we'll need is one spectacular accident. When innocent people are victims, there will be a public outcry which will result in draconian regulations which we'll all regret. The general public is not exactly enamored of small airplanes anyway. A well-publicized accident; e.g. a mid-air or a crash into a school yard, will be "all she wrote."

Most of aviation medicine is preventive in nature. The long run cost of abandoning this preventive measure is something we simply can't afford.

Past Presidents of the Civil Aviation Medical Association Attending CAMA Luncheon

Silvio Finkelstein, M.D. (1974-1975); James L. Tucker, Jr., M.D. (1995-1996); M. Young Stokes III, M.D. (1987-1989); Stephen V. Blizzard, M.D. (1991-1993); John H. Boyd, D.O. (1985-1987); Robert L. Wick, Jr., M.D. (1971-1972)



PRESIDENT'S MESSAGE

The Federal Aviation Administration on March 13 issued the most comprehensive revision of pilot medical standards and procedures in more than 25 years. Those who want to read the full text will find it in the March 19th issue of the Federal Register. Elsewhere in this Bulletin is a synopsis and brief discussion of the changes.

Plans are under way for our annual meeting in Virginia Beach, Virginia October 17-19 1996 at the Radisson Hotel. Be sure and mark your calendar to attend. The agenda features outstanding speakers, a chance to visit with old friends, and an opportunity to make new ones. And don't forget the visit to Williamsburg scheduled during this meeting. This will be a family outing which you'll not want to miss.

Highlights of the meeting itself will include the Surgeon General of the US Air Force as the Thursday luncheon speaker. After a short scientific session Friday morning, we'll spend the rest of the day at historic Williamsburg. This will be fun for the entire family. Saturday will include another scintillating scientific session followed by the annual business meeting, election of officers, and the Honors Night banquet. Attendees at this year's meeting will earn 22 hours of AMA Category I credits along with an update concerning the latest in civil aviation medicine. The detailed schedule will be forwarded shortly.

I'm looking forward to seeing each of you at Virginia Beach on October 17-19, 1996. Be sure and be there!

Sincerely,

James L. Tucker Jr., M.D.
President, CAMA

CAMA BOARD MEETING



CAMA LUNCHEON





MEDICAL EXAMS; WHO, HOW, AND WHY? (Cont'd)

(The Winter 1996 issued contained Part 1 of this article. It described how it was realized that ordinary military standards in force during WW I were not suitable for those assigned to the fledgling air services. Only when the first "flight surgeon" physicians studied the problem was it realized that more stringent standards were necessary for flyers than were needed for the infantry, artillery, etc.)

After the war, technical progress slowed. There were so many surplus aircraft and engines available that there was little incentive to develop newer models. By the late 1920s however, the surplus engines and airframes were about used up, and marked advances took place. Now familiar names–Boeing, Douglas, Lockheed, Curtiss, Ryan, Martin, Pratt and Whitney, Wright and others began to appear on new engines and aircraft.

The first US civil aviation licensing regulations were enacted about 1926. Civil authorities adopted slightly modified military medical standards, although experienced pilots could be given waivers. In general however, basic WW I era standards were used for civil airmen in the late '20s and all through the '30s. For example, part of the medical exam in the 1920s and '30s included a cardiovascular test called the Schneider Index. It was finally dropped in 1943 when it became apparent that it wasn't related to flying ability.

Another 1918 test measured a pilot's ability to withstand hypoxia, that is, tolerance for high altitudes. (World War I aircraft generally were not equipped with supplemental oxygen.) Would-be pilots were taken to simulated altitudes in a low pressure chamber. Most had minimal altitude tolerance. In any case, altitude tolerance was a poor substitute for supplemental oxygen equipment. The test was dropped when aircraft oxygen masks and bottles were developed.

Compared with wartime progress, aircraft designs didn't change much between the two world wars. For example, just prior to WW II, US forces were still flying a few biplane fighters and a handful of others with open cockpits. Contrast that with the jet fighters just becoming operational at the end of WW II and the swept wing aircraft already on designer's drafting boards.

WW II escalated the demand for pilots. US forces needed tens of thousands, and needed them quickly. The existing medical requirements were called into serious question for the first time in years. Careful research changed previous medical thinking about some, and others were simply dropped because of the press of the war. It was satisfactory to take risks that would be unacceptable in peace time. Vision standards provide an interesting example.

In the 1920s, almost all civil aircraft were open cockpit types. Early commercial airliners had them even though passengers rode in crude cabins. Pilots of that day felt that they had to feel the air currents associated with slips and skids. But open cockpits also meant that the pilots had to wear helmets and goggles.

The medical standard for uncorrected distant vision at that time was based on aviator's goggles. (There is a practical limit to the amount of correction available in goggle lenses because they sit farther from the eye than do ordinary glasses.) Closed cockpits became the norm in the 1930s. Until then there wasn't any reason to change the uncorrected vision standard. Once enclosed cockpits became common, pilots could wear regular glasses instead of goggles. Uncorrected vision standards were lowered because vision could be better corrected with ordinary spectacles than with goggles.

WW II generated a number of interesting experiments including another which involved vision. Military pilots were required to have 20/20 uncorrected vision prior to being selected for flight training. The intense demand caused a relaxation in the visual standards for a limited time. In a student pilot class where all had 20/20 vision, some 80-85% would successfully complete flight training. In a class with uncorrected vision of 20/30–even though vision was corrected to 20/20 with glasses–about 65% would complete flight training. With vision of 20/40, the completion rate was 50% or even lower. In other words, the worse the uncorrected vision, the higher the washout rate even though trainees all had at least 20/20 vision with glasses.

✈ ✈ ✈ *(continued on page 13)*

(LONG-AWAITED MEDICAL CHANGES PUBLISHED continued from page 1) ✈ ✈ ✈

vision for Class I and II certificate holders. This is long overdue, since bifocals can become a serious problem in a large airliner cockpit. A clear top segment works well for distant vision through the windshield. The bifocal segment is satisfactory for reading charts, checklists, and so on. However, neither segment will permit clear intermediate vision at the instrument panel distance. Many pilots opt for trifocals with an intermediate segment for reading the instrument panel gauges clearly. A few even select quadrifocals with a small close vision upper segment so that they can read the labels on overhead switches and circuit breakers.

One of the changes which is still not clear at this point is the color vision standard. In place of the requirement to see aviation signal red, green and white, the pilot must now be able to "...perceive those colors necessary for safe performance of airman duties..." We'll have to wait for the implementing instructions to be find out exactly what that means and more important, how we are to test and apply standards for it.

(CAMA has long been opposed to the previous color vision requirement. Less than a quarter of those with color vision weaknesses were restricted by the color vision standards. Moreover, study after study showed no correlation between color vision and aircraft accidents. - Ed.)

A second area still up in the air involves blood pressure. The previous regulations mentioned blood pressures over 170/100 as disqualifying for Class II and III applicants and age-adjusted values were given for Class I applications. Obviously these were arbitrary values. Moreover, the pressures listed were quite high and did not reflect good medicine.

For some reason, the FAA proposed 150/95 as disqualifying in the new rules–an equally arbitrary value. Fortunately, this proposal was dropped before the new rules were published. However, since no values were announced, we'll also need to see what the new AME guide says about blood pressure before we can be sure what the regulations mean.

(CAMA held a number of private discussions with FAA officials about their proposed blood pressure values. As noted, they appear to have listened and published a rule with common sense behind it instead of an arbitrary value. - Ed.)

The requirements for cholesterol determinations, ECG's for other than Class I certificate holders, and a few other miscellaneous issues were dropped in the final rule. Also dropped were some of the "weasel word" phrases which would have allowed the FAA virtually unlimited authority to make or change regulations on the spot without any notice. In particular, the phrase "...included, but not limited to..." does not appear in the final rule.

There were some additional clarifications concerning organ transplants and certain mental disorders. While these were restricted in the published regulations, it does not mean that pilots with these problems will be prohibited from flying. They'll still be eligible for individual consideration under the special issuance or similar provisions.

On balance, the final rules are an improvement. The Federal Air Surgeon and his staff are to be congratulated for a reasonable solution to what started out as a rather unwelcome series of proposed changes.

HEARD IN THE WIND

In 1995, there were eight fatal accidents involving pilots who held special issuance medical certificates ("waivers"). These pilots had medical problems which did not permit them to meet the regular medical standards. All the special issuances in this accident group were given for cardiovascular disease. Obviously this is of concern to the FAA. Look for a tightening of the criteria for special issuance medical certificates–especially those given to pilots with a history of cardiovascular problems.

CAMA FILES POSITION ON "SELF-CERTIFICATION"

Federal Aviation Administration
Office of the Chief Counsel,
Attn: Rules Docket (AGC-200)
Room 915G Docket No. 25910
800 Independence Avenue S.W.
Washington, D.C. 20591

The Civil Aviation Medical Association represents physicians who are aviation medical examiners. It is the only organization devoted solely to aviation medical examiners and their practices. CAMA appreciates the opportunity to comment for the record concerning the portion of this Notice of Proposed Rule-Making which relates to "self-certification" for recreational pilots.

CAMA is concerned that this proposal is not in the best interests of public safety. It proposes to permit pilots to fly with recreational certificates, or with higher grades of certificates when flying within the limitations of a recreational certificate equivalent, without any medical examination. There are a number of problems which CAMA foresees with such a procedure.

First, this proposal is not in the long term interests of any pilot. Minor problems will be picked up during the FAA medical examination and can be managed before they become major problems. For example, early hypertension will be apparent and can be treated promptly. Undetected, it generally will become worse and ultimately can lead to strokes and/or severe heart disease. Most important, hypertension is seldom apparent to the victim, and anyone "self-certifying" will not recognize his or her problem.

There are a number of other medical problems which cannot be recognized by an individual who evaluates his or her own medical condition, but which are equally incompatible with safe flight. Examples include psychoses, early cancers, and cognitive deficits to name just a few. There are numerous others as well.

Second, a major component of the normal human psyche is denial. Some individuals can be expected to deny to themselves the seriousness of their medical problems. They will use this provision to fly when they should not and cannot otherwise hold any class of medical certificate. A classic example is alcoholism. However, it is also common among those with diabetes and with various types of heart disease. Medically-related accidents will inevitably follow as a result of this denial.

Third, there will be a small number of pilots who know that they cannot hold medical certificates and should not fly, but who will use the provisions of this proposal to fly anyway. They know that they cannot be asked to show a medical certificate. Without question, these also represent an unacceptable risk to aviation safety.

The argument has been advanced that the cost of a medical certificate is a deterrent to flight. This is specious. The biennial medical examination cost is equivalent to 30 minutes of flying time or less per year in a recreational aircraft. It is less expensive than the cost of a biennial refresher flight check. Yet no one has suggested that such a flight check cost discourages pilots from learning to fly.

It has also been noted that both glider and free balloon pilots are not required to have medical certificates. However, the proponents of that argument have not listed the small number of pilots who hold glider or free balloon certificates only. Even more important, they have overlooked the very few hours these pilots fly when compared to those flown annually in general aviation powered aircraft. In addition, the locations where these aircraft operate are generally not urban or other densely populated areas. Thus, they do not pose a risk to the public comparable to that associated with recreational or other general aviation aircraft.

The number of medically related accidents is not presently known. Unfortunately, complete and thorough medical examinations are too seldom performed after a fatal accident. A medical evaluation is even less likely following a non-fatal accident. It is virtually unknown where there is a medical problem in flight which purely by luck does not result in an accident. Therefore, while we acknowledge that medically-caused accidents are rare, they are certainly larger in number than the available data suggest. Moreover, the fact that there are few such accidents is actually a tribute to the effectiveness of the current system. To eliminate this system without data to support such a change is folly.

There are a number of steps which can be taken to more fully investigate the wisdom of the

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(MEDICAL EXAMS continued from page 6)

proposed changes. The Civil Aeromedical Institute is in a good position to carry out the needed investigations. The number of glider-or-balloon-only rated pilots who do not hold medical certificates should be determined as should their annual flying time. These records should be available in Oklahoma City. The ratio of these numbers and their associated flying hours to those of powered general aviation aircraft should be determined.

A careful search for autopsy records must then be made for all cases in which such an examination was performed following a fatal aircraft accident. In some cases, these may be resident in Oklahoma City. In others, they may be found in various regional flight surgeon's offices. Once located, the appropriate evaluations can be conducted.

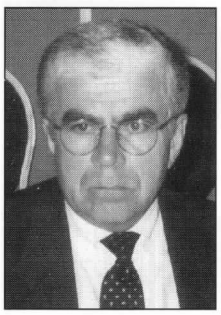
A second phase should include a concerted effort to obtain post-mortem examinations following all fatal aircraft accidents. Once a statistically valid sample has been obtained, an appropriate analysis will result in logical conclusions. The assistance of the Civil Air Patrol and various aerospace medicine as well as pathology residency programs should be obtained. Cooperation from local coroners and medical examiners can be solicited in addition to using internal FAA resources to obtain these examinations.

When these data are available, rational conclusions will determine the need for, and value of the various parts of the medical examination. It may then be possible to modify or perhaps even eliminate parts of the current medical examination protocols. Those remaining can be oriented toward the type of flying performed.

The Department of Transportation has set a zero accident rate as the goal for the aviation community. To eliminate medical examinations for a significant fraction of the general aviation population flies in the face of that goal. CAMA is opposed to such an elimination. Periodic medical examinations contribute to public safety and to the reduction of accidents. Our responsibility to the public demands that the currently successful medical examination programs be continued.

James L. Tucker Jr., M.D.
President

TAMISIEA AWARD



John D. Hastings, M.D. was presented the John A. Tamisiea Memorial Award at the Aerospace Medical Association annual meeting in Atlanta, Georgia, May 9, 1996. This award is sponsored by the Civil Aviation Medical Association.

Dr. Hastings received the award for his outstanding contributions in the application of the art and science of aviation medicine to general aviation. His contributions include the development and application of sound neurological principles for correct medical certification of pilots, the review and interpretation of hundreds of sets of neurological data from pilots, and extensive consultative work, both medical and educational, with the Federal Aviation Administration, Civil Aviation Medical Association and the National Transportation Safety Board.

CAMA LUNCHEON SPEAKER

The Civil Aviation Medical Association was honored to have John Holliman as it's Luncheon Speaker at the Aerospace Medical Association Meeting May 6, 1996, at Atlanta, Georgia. Dr. Stacy Vereen, a close personal friend, introduced him.

Interestingly, Mr. Holliman received his private pilots license in May, 1995.

John Holliman is a general assignment correspondent based in CNN's Washington, DC bureau. Holliman was instrumental in CNN's coverage of the war in the Persian Gulf. He and his CNN colleagues, Peter Arnett and Bernard Shaw, were the only three journalists reporting from Baghdad on January 16, 1991, the evening the allied air attack began on Iraq's capital. John gave those attending the luncheon a true insight as to what went on during his coverage of the war.

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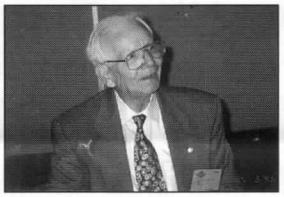

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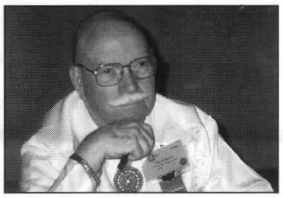

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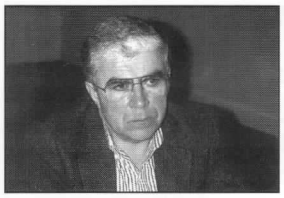

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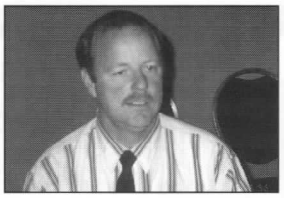

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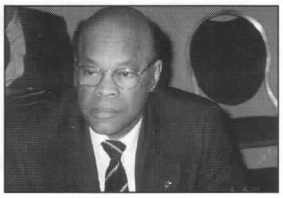

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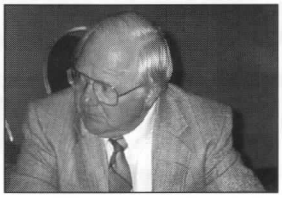

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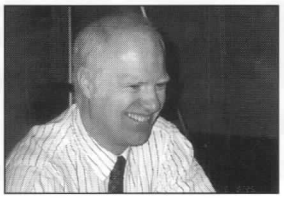

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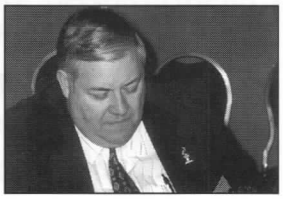

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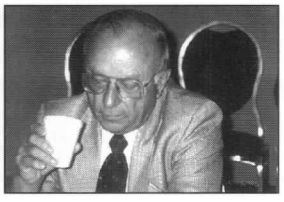


W. David Rummel, M.D.

CHANGES PROBABLE IN REQUIRED SEMINAR ATTENDANCE

Several years ago, the FAA shortened the interval between required aviation medical examiner (AME) seminars. All examiners are now required to attend an FAA seminar every three years instead of once every five years. In part, this was an attempt to cut down the unacceptable error rate—then running as high as 50%—on the Form 8500s coming from examiners. Moreover, a few AME's were not familiar with the ways to help pilots who had various medical problems. The seminars were also intended to educate AME's about how medical problems could be surmounted in the certification process.

But now there's a cloud on the horizon. It's called the federal budget....

The FAA, as much of the rest of the federal government, is now being subjected to tightened purse strings. There just isn't as much money available as there once was. That's reflected in the FAA's Office of Aviation Medicine budget as lessened funds for staff, operations, research, and other programs, etc. The AME seminar program has therefore been cut. While the final dollar numbers are not yet firm, it looks like the number of seminars will be something on the order of half those previously held; i.e. perhaps six seminars a year in place of the dozen or so typically organized in the past.

What effect will this have on the practicing AME?

No one is sure, but there are several possibilities. One possible solution is to return to a five or six year interval between required seminars. While this might meet the budget constraints, it wouldn't keep AME's up to date on the latest examination requirements. In addition, the error rate might creep up once again. Consequently, the FAA probably won't adopt this course of action.

Another obvious solution would be to hold larger seminars; e.g. perhaps 250-300 physicians at a time instead of 125 or so. While this should allow retention of the three year seminar cycle, it does have drawbacks. Much larger meeting facilities would be required and this will entail increased costs. Moreover, larger facilities are more difficult to find and schedule—also a drawback. "Breakout" session may become so large as to be unwieldy. In addition, the smaller number of annual seminars decreases the practicing AME's flexibility to choose from various seminar dates and locations.

What else might the FAA require?

There are several possibilities. One such would drop the three year seminar requirement to something like every six years but require individual study. The FAA could require the AME to take a special correspondence course in the intervening three year interval. This correspondence course would be developed by the FAA to keep AME's up to date on changes since their last seminar.

As a variation, the FAA could develop a television instructional course for the same purpose as the correspondence course. A TV course originating in Oklahoma City would obviate the need for travel, eliminate repetitive seminars, and minimize high faculty and staff costs.

Final decisions have not yet been made. Watch these pages for the latest developments. Without question, changes are in the wind.

(CAMA has already experienced the effects of the coming changes. The FAA will not be able to support the annual fall CAMA meeting for the first time in many years. CAMA volunteered to cover the costs of the necessary FAA staff, but the FAA declined the offer. - Ed.)

(AGE 60 RULE PUT TO BED continued from page 1)

apply to commuter operations as well. This includes the age 60 retirement rule for pilots. The commuter airlines have four years to phase in this retirement provision.

Interestingly, the Air Lines Pilots Association (ALPA)–the pilots union for most airlines–has always supported the age 60 retirement as has the Allied Pilots Association (APA)–the union for American Airlines pilots. (These two unions represent the great majority of all airline pilots in the U.S.A. Small groups; e.g. Southwest airline pilots, are represented by company unions or by others. - Ed.) The majority of these union members are younger pilots. In the strict seniority system found at all major airlines, the longer an older pilot stays on the seniority list, the longer it takes for a younger pilot to move up to larger aircraft, higher pay, more desirable routes, better schedules and so on.

Surveys of airline pilots nearing age 60 show that the great majority wish to retire. They've spent enough nights in distant motels, eaten enough crew meals, and are no longer thrilled at the prospect of dodging thunderstorms, shooting approaches to minimums, and sweating out their periodic proficiency checks.

There does appear to be a pattern to those groups who challenge the age 60 rule. Members of these relatively small groups tend to be pilots who began their airline careers somewhat late in life. Some have lived "high on the hog" and have not saved anything for retirement or are divorced and have large alimony payments to make. Still others want to deny to themselves the inexorable aging process by continuing to fly. There are also a few who genuinely like flying, and are "younger" than their chronological ages.

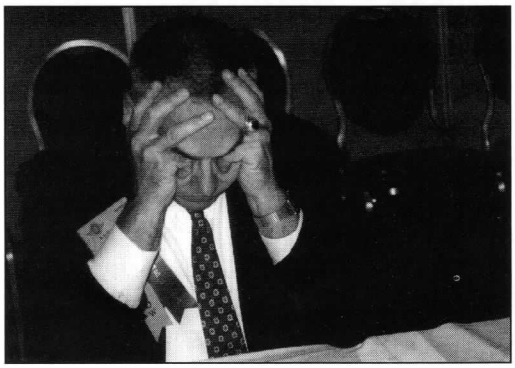
A few airlines do have an alternative for those who wish to continue flying. Since the age 60 rule does not apply to flight engineers, a handful of pilots will "bid down" and continue working in the engineer's seat. The pay is good although not what they earned as captains. Since they are very senior, they do get their choice of routes and days to fly.

This option is becoming more limited as older "three crew" airliners are phased out and retired however. New airliners; e.g. the Boeing 757,767,777, 747-400, and the MD 80, MD-11, etc. require only two pilots. The number of older 727's, 747's and DC-10's which require a flight engineer is shrinking every day.

Are challenges to the age 60 rule a thing of the past?

Not likely. Our national life span is increasing. Some European airlines now permit pilots older than 60 to continue flying under special circumstances. It's only a matter of time before someone or some group mounts the next assault.

Stay tuned for further developments.



ROBERT L. WICK JR., M.D.
PAST PRESIDENT, CAMA BULLETIN EDITOR

Dr. Wick expresses his frustration because the lack of contributions to the newsletter by members.

Wanted

Dedicated CAMA members willing to make further contribution to our education, public relations, and legislative programs. Become a Sustaining Member by applying to the Board and paying $180.00 per year in dues. Your status and dedication as a Sustaining Member will be recognized in CAMA publications and respected by your peers. Our award plaque will proclaim to your friends and patients your participation and CAMA's gratitude.

News

MEETING SCHEDULES

FAA AVIATION MEDICAL EXAMINER (AME) SEMINAR SCHEDULES

Baltimore, MD . . . . . .June 21-23, 1996
Minneapolis, MN . . . . . .August 2-4, 1996
Seattle, WA . . . . . .August 23-25, 1996
Oklahoma City, OK . . . . .September 16-20, 1996
Dallas, TX . . . . . .October 25-27, 1996
Oklahoma City, OK . . . . .November 18-22, 1996
Phoenix, AZ . . . . . .January 10-12, 1997
Oklahoma City, OK . . . . . .February 3-7, 1997
Ft. Lauderdale, FL . . . . . .March 21-23, 1997
Washington, DC . . . . . .April 18-20, 1997
Chicago, IL . . . . . .May 12-15, 1997
Portland, OR . . . . . .June 20-22, 1997
Oklahoma City, OK . . . . . .August 18-22, 1997

For more information, contact your Regional Flight Surgeon or:
MR. DOUGLAS R. BURNETT
AAM-400
AEROMEDICAL
EDUCATION DIVISION
P.O. BOX 25082
OKLAHOMA CITY, OK 73125
(405) 954-4830 / 6214

✈ ✈ ✈ ✈ ✈

68th Annual Aerospace Medical Association Meeting
Hyatt Regency Chicago
Chicago, IL . . . . . .May 11-15, 1997

For more information on the AsMA meeting, contact:
RUSSELL RAYMAN, M.D.
ASMA
320 S. HENRY STREET
ALEXANDER, VA 22314
(703) 739-2240

✈ ✈ ✈ ✈ ✈

44th International Congress of Aviation and Space Medicine
September 8-13, 1996
Jerusalem, Israel
For more information contact:
Secretariat
P.O. Box 50086
Tel Aviv, 61500, Israel

ANNUAL CAMA MEETING DATES

Virginia Beach, VA . . . . . .Oct. 16-20, 1996
New Orleans, LA . . . . . .Sept. 3-6, 1997
Los Angeles, CA . . . . . .Sept. 2-6, 1998

CAMA will publish specific information when details are available.

CAMA Headquarters
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73123-2864
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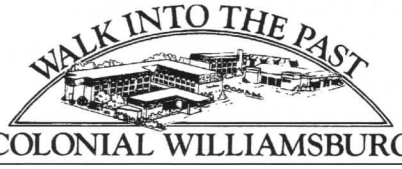
FAX (405) 848-1053

CAMA Annual Scientific Meeting October 16-20, 1996 Virginia Beach, Virginia Radisson Hotel

Make your plans now to attend the Thirty First Annual Scientific Meeting of the Civil Aviation Medical Association, in Virginia Beach, Virginia. One day will be a family day with a tour of Colonial Williamsburg. Don't miss out on all the fun, mark your calendar now. -October 16-20, 1996. See you in Virginia Beach.



NEWS OF MEMBERS

Long time CAMA board member Dr. Jim Almand (also Colonel James Almand, USAF Reserve) of Grand Prairie, Texas, just returned from providing medical support for the military operations in Bosnia. As a reserve component physician, he was supporting the deployment of F-16 fighters from Carswell Joint Reserve Base in Fort Worth. Dr. Almand also helped to specify the types of medical and nursing professionals needed for these rapid mobilizations.

Dr. Jim Tucker, current CAMA president and a practicing ophthalmologist in Abilene, Texas, is well known to many AME's as one of the FAA's ophthalmology consultants. He also lectures at many of the AME seminars. Most recently, Dr. Tucker was quoted extensively in the May issue of FLYING. The article dealt with sun glasses and the protection they provide. As expected, the article was slanted toward aviators. Dr. Tucker's sage advice was sprinkled extensively throughout the article.

(MEDICAL EXAMS continued from page 4)

Remember that there was a war on with no time to waste on those less likely to finish pilot training. Pilots were needed quickly. From a military standpoint, it was–and still is–most cost-effective to select only those with 20/20 vision for flight training. This provides the highest probability of successful training completion for each candidate who starts. Military flight training presently runs into the millions of dollars, so it is clearly in the taxpayer's interest to minimize washouts.

Unfortunately, there are no data about success in combat or other operational flying for those with less than 20/20 vision who did make it through flight training. We just don't know how well or how poorly they did.

Happily that's not something to worry about in civil aviation. Only those with really severe visual problems won't be allowed to fly. Almost anyone who can pass a state driver vision examination can also meet the aviation vision standards. That includes thousands of active pilots with vision problems of one sort or another. It even includes a handful of airline pilots who are completely blind in one eye.

There was also a WW II school of thought which held that outstanding physical fitness would guarantee success in flight training. Pilot applicants were given stiff physical fitness tests. Studies finally proved that they did no better than others who were only reasonably fit.

Although never addressed specifically, these selection tests infer that a desire to fly is probably the most important qualification of all. To date however, no test battery has been developed to measure these interests on the part of would-be pilots.

The explosive growth of civil aviation after WW II also bears on the questions. Thousands upon thousands of military-trained aviators were released from active duty. Many wanted to continue flying. Piper, Beech, Cessna, Taylorcraft, Ercoupe, Luscombe, Mooney, Temco, North American, Meyers and others built light aircraft in numbers which have not been matched since.

Between the late 1920s and WW II, all pilots had to have medical examinations performed periodically by designated civil "flight surgeons" now better known as Aviation Medical Examiners (AMEs). The tremendous demand after the war swamped the available AMEs. The CAA (predecessor to the FAA) changed the rules so that Class III examinations could be performed by any licensed health practitioner. But this change caused other problems.

At that time, there were some 300,000 physicians in the U.S.A. (There are more than 650,000 today.) Doctors are notably independent, and consequently there were 300,000 different opinions about what it took to be a private pilot. Some doctors strongly believed in the "superman" concept; i.e. flying was so demanding that it required virtually a perfect physical specimen. Others were so lax that they would let absolutely anyone fly. The result was obviously unsatisfactory.

Worse, the medical licensing laws of various states played an unexpected role. In one celebrated case, a faith healer sent in a medical report saying "...(the applicant) and I have had prayer together, and I con-

(continued on page 14)

WELCOME NEW CAMA MEMBERS ✈ ✈ ✈ ✈

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820 North Chelan
Wenatchee, WA 98801, USA
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Nuclear Radiation Med. P AME

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SRS Medical Group
525 3rd Avenue
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619-585-4050
Family Practice P AME

Note: P - Pilot

(MEDICAL EXAMS continued from page 13) ✈ ✈ ✈

sider him qualified to fly..." Because faith healers were licensed health practitioners in that particular state, the certificate was technically legal.

That case and others almost as bad caused consternation. As a result, the FAA returned to the designated AME system for all medical examinations in 1960. The FAA today plans for a ratio of roughly 90-100 pilots for each designated AME in metropolitan areas. In areas where it is a long way between towns, they try to make sure that no pilot must travel more than 50 miles to find one. Moreover, with the exception of those in sparsely populated areas, an AME who doesn't perform at least a dozen examinations a year may lose his or her designation. This is one way the FAA makes sure that AMEs keep current.

Today there are about 7,000 U.S. AMEs. Roughly 2,200 are authorized to administer Class I, II, and III examinations. The rest are limited to Class II and III exams only. About half are rated pilots, and are obviously both interested and knowledgeable about aviation.

Given this complex system, how well does it work?

(To be concluded)

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PURPOSE:

"To provide civil aviation physicians with education, representation to government, and a voice within the industry and the public."

OBJECTIVES:

- To promote the best methodology for assessment of the mental and physical requirements for civil aviation pilots.
- To actively enlarge our scientific knowledge.
- To advocate, through continuing education, both basic and advanced civil aeromedical knowledge.
- To promote professional fellowship among our colleagues from allied scientific disciplines.
- To bind together all civil aviation medical examiners into an effective, active medical body to promote aviation safety for the good of the public.

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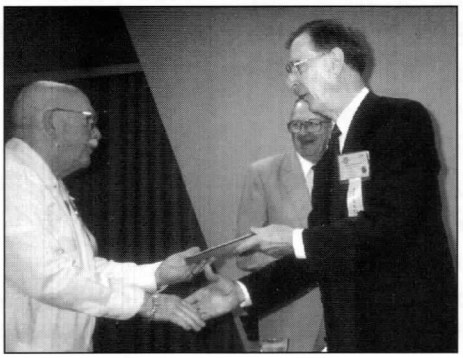
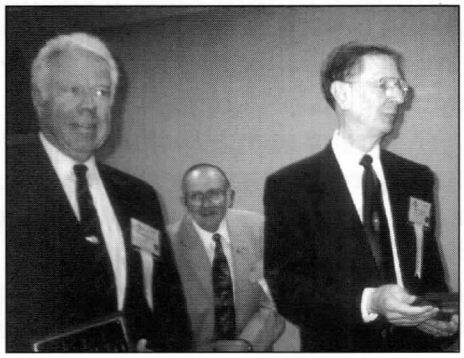


John H. Boyd, D.O.



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The financial resources of individual members alone cannot sustain the Association's pursuit of its broad goals and objectives. Its forty-five year history is documented by innumerable contributions toward aviation health and safety that has become daily expectations by the world's flying population. Support from private and industrial sources is essential for CAMA to provide one of its important functions, that of education. The following support CAMA through Corporate and Sustaining Memberships:

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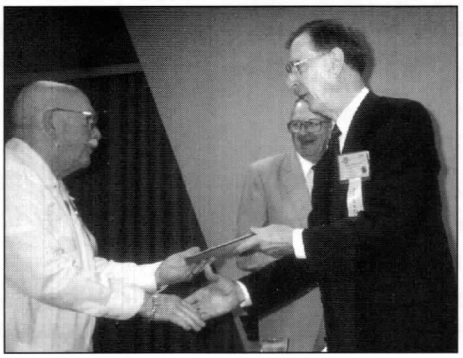

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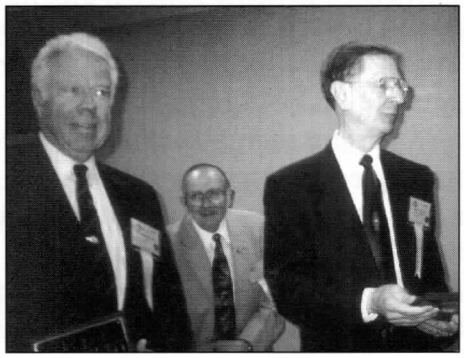

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